12/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347: JAPIO

03566436 **Image available**
DISK CACHE SYSTEM

Pub. No.: 03-229336 [JP 3229336 A]
Published: October 11, 1991 (**19911011**)
Inventor: HIRAI YOSHIRO
NAKANO ICHIRO
ARIGA KENICHI
Applicant: FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)
Application No.: 02-023948 [JP 9023948]
Filed: February 02, 1990 (19900202)
Journal: Section: P, Section No. 1296, Vol. 16, No. 9, Pg. 91, January 10, 1992 (19920110) ...
Published: 19911011)

ABSTRACT

PURPOSE: To efficiently use a disk cache memory by providing an **access history holding part**, and redividing the **inside** of the disk cache memory at every channel in accordance with the contents of the access **holding part**.

... ...CONSTITUTION: An **access history holding part** 20a **holds** how many times a disk device 21 in charge of by itself is accessed, and... ...its value is updated one by one. In such a state, by referring to an **access history** display part 20a at an arbitrary time, the **access history** information of this disk cache memory 5 is recognized, and based on a result of recognition, a **divided** using area of the disk **cache** memory 5 is changed. Accordingly, to a channel whose using frequency is always the highest Di01

12/3,K/4 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0015606977 *Drawing available*
WPI Acc no: 2006-171149/200618
Related WPI Acc No: 2006-228570; 2006-453737
XRPX Acc No: N2006-147632
Network characteristics recording method for use over e.g. internet, involves utilizing filter to capture requests that are received by recording server, and storing captured requests in data collector file for playback
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: NACE E W; STONE A C

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20060031054	A1	20060209	US 1999461900	A	19991215	200618	B
			US 2005241021	A	20050930		
US 7580822	B2	20090825	US 1999461900	A	19991215	200956	E
			US 2005241021	A	20050930		

Priority Applications (no., kind, date): US 1999461900 A 19991215; US 2005241021 A 20050930

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20060031054	A1	EN	17	8	Division of application	US 1999461900
US 7580822	B2	EN			Division of application	US 1999461900
					Division of patent	US 7013251

Original Publication Data by AuthorityArgentina**Publication No.** ...**Claims:**1. A method of recording network characteristics on a computer network having a server, comprising **using** a **record** module disposed on the server to produce a custom-generated log file containing network characteristics... ... network having a server, comprising: receiving a request from a client on the computer network **in** several **portions** such that each **portion has** a header **section containing** header and tracking information and a body **section containing** network data; **using** a **record** module disposed on the server capture each of the several portions of the request from... ... data file, for storing other types of data; caching the header information of an incoming **portion** of a request **in** memory until all

headers for that request are received **in** order to **separate** the header **section** of the request portion from the body section of the request portion; piecing the header... Basic Derwent Week: 200618

12/3,K/8 (Item 5 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013441087 *Drawing available*
WPI Acc no: 2003-532178/**200350**
Related WPI Acc No: 2005-724369; 2005-733158
XRPX Acc No: N2003-422308

Data storage system for building control system, has file system integrated with database manager, that is adapted to access dynamic data in dynamic data file using memory pointers

Patent Assignee: GAGNER M (GAGN-I); POLLOCK P (POLL-I); SOEMO M (SOEM-I); STEWART J (STEW-I) ; SIEMENS BUILDING TECHNOLOGIES INC (SIEI)
Inventor: GAGNER M; POLLOCK P; SOEMO M; STEWART J

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030078907	A1	20030424	US 200154751	A	20011022	200350	B
US 7072879	B2	20060704	US 200154751	A	20011022	200644	E

Priority Applications (no., kind, date): US 200154751 A 20011022

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20030078907	A1	EN	17	9	

Alerting Abstract ... ADVANTAGE - Time is saved significantly and the need for creating **separate cache** for each application is eliminated. Memory space is **conserved**.Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**defines an arrangement of a set of data fields and data records included in the **database**. A database manager **uses** a file system to access the files in a rapid manner using an address pointer... ... a set of data fields and data records included in the database. A database manager **uses a** file system to **access** the files in a rapid manner using an address pointer and, because the data is... ...**Claims:**partitioned into a first section and a second section, said first section comprising static data **and** being stored **in a** static memory **device**, said second **section** comprising dynamic data **and** being stored **in** a dynamic memory **device**; and,a database manager for managing said database... Basic Derwent Week: **200350**

Dialog eLink: Order File History
12/3,K/14 (Item 11 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0012629921 *Drawing available*
WPI Acc no: 2002-478708/**200251**
Related WPI Acc No: 2000-022996
XRPX Acc No: N2002-378013
Video signal capturing/storing method in cable television, involves synchronizing streaming digital blocks from linear caches such that they are correctly positioned relative to each other
Patent Assignee: BARTON J M (BART-I); TIVO INC (TIVO-N)
Inventor: BARTON J M

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020034374	A1	20020321	US 199761693	P	19971010	200251	B
			US 199854604	A	19980403		
			US 2001994265	A	20011126		
US 6792195	B2	20040914	US 199761693	P	19971010	200460	E
			US 199854604	A	19980403		
			US 2001994265	A	20011126		

Priority Applications (no., kind, date): US 199761693 P 19971010; US 199854604 A 19980403; US 2001994265 A 20011126

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20020034374	A1	EN	15	3	Related to Provisional	US 199761693
					Continuation of application	US 199854604
US 6792195	B2	EN			Related to Provisional	US 199761693
					Continuation of application	US 199854604
					Continuation of patent	US 6327418

Alerting Abstract ...NOVELTY - Multiplexed components of a video signal are

separated before storing them into **separate** linear **caches** (204). A playback pointer selects a portion of caches for streaming access. A cache controller... Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**stream, appears to be a fixed length segment under certain circumstances, defining a virtual segment **within** the continuous **stream which** moves forward **in** time **in** synchrony **with** the **continuous** stream. The virtual **segment** thus defined can **be** explored **in** a non-linear **fashion** at arbitrary playback rates. For instance, concepts such as rewind, pause, frame advance, and fast... ... information stream, appears to be a fixed length segment under certain circumstances, defining a virtual **segment within the** continuous stream which moves forward **in time in** synchrony with the continuous stream. The **virtual segment thus** defined can be explored **in** a non-**linear** fashion at arbitrary playback rates. **For** instance, concepts such as rewind, pause, frame advance, and fast forward become meaningful even though... ...**Claims:**means for capturing said video signal and separating multiplexed components of said video signal before **storing** said components into **separate** linear **caches**;providing **cache** playback means for **selecting** a **portion** of said linear **caches** for streaming access;providing cache control means for controlling a rate of streaming access from... ... video signal and separating multiplexed components of said video signal before storing said components into **separate** linear **caches**;providing **cache** playback means for selecting a portion of said linear caches for streaming access;providing **cache** control **means** for controlling a rate of streaming access from said linear **caches**;**synchronizing** streaming **digital** blocks from said **linear** caches for delivery to said cache playback means;wherein said cache control means sends clock... ... other;wherein said linear caches maintain a window that represents a time span into a **past history** of said video signal that **includes** a currently captured **portion** of said video signal; andwherein said linear caches discard any information that outside ofBasic Derwent Week: **200251**

12/3,K/17 (Item 14 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0010533958 *Drawing available*
WPI Acc no: 2001-136368/**200114**
Cache memory utilization involves logging write request data in specific write cache segment when prior write cache segment is full and moving write request data from write cache segment to disk segment
Patent Assignee: LSI LOGIC CORP (LSIL)
Inventor: DEKONING R A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6148368	A	20001114	US 1997904107	A	19970731	200114	B

Priority Applications (no., kind, date): US 1997904107 A 19970731

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6148368	A	EN	29	16	

Cache memory utilization involves logging write request data in specific write cache segment when prior write cache segment is full and moving write request data from write cache... Alerting Abstract ...NOVELTY - **Cache** memory and disk space are **divided** to logically define write **cache** and disk segments. Received write request data is logged **in** write cache **segment** and thereafter remaining write request data is logged **in** another write cache **segment** when previous cache segment is full. Write request data is moved from write cache segment to disk segment based on accumulation of redundancy data **in** data cache **segment**. ...devices and assures data reliability and integrity by dynamically tuning the size and number of **segments** allocated **within** the cache memory and the cache extension region of the disk array... Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**accelerating write operations logging write requests in a log structured cache and by expanding the **log** structured cache **using** a cache-extension disk region. The log structured cache include a cache memory region partitioned... ...one or more redundancy-data (parity) cache segments. The cache-extension disk region is a **portion** of a disk array **separate** from a main disk region. The cache-extension disk region is also partitioned into segments... ...disk region thereby freeing the write cache segment for reuse. The redundancy-data (parity) cache **segment holds** redundancy data for recent write requests, thereby assuring integrity of

the logged write request data... ...**Claims:**a plurality of log-structured write cache segments and at least one redundancy-data cache **segment**;b) partitioning disk space **in** said subsystem to logically define log-structured cache region having at least one disk segment;c) logging first write request data corresponding to received write requests **in** a first **segment** of said plurality of write cache segments until said first segment is full;d) logging further write request data corresponding to received write requests **in** a second **segment** of said plurality of write cache **segments in** response to said first **segment** being full;e) accumulating, **in** said redundancy-data cache **segment**, redundancy data corresponding to said first write request data;f) moving said first write request data from said first write cache segment to one of said at least one disk **segment in** response to accumulating said redundancy data; andg) repeating steps c) through f) where said...
Basic Derwent Week: **200114**

12/3,K/18 (Item 15 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0010322694 *Drawing available*
WPI Acc no: 2000-637213/**200061**
Related WPI Acc No: 1999-243537; 1999-262633; 1999-262634; 1999-394141; 1999-404079; 1999-478290; 1999-539499; 1999-580107; 1999-590672
XRPX Acc No: N2000-472511

Processing method of commands from host for disk drive, involves starting host or disk side programs based on full or partial cache hit

Patent Assignee: WESTERN DIGITAL CORP (WDIG-N)
Inventor: HICKEN M S; HOWE S M; SOKOLOV D J; SWATOSH T; WILLIAMS J L

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6092149	A	20000718	US 1997864525	A	19970528	200061	B

Priority Applications (no., kind, date): US 1997864525 A 19970528

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6092149	A	EN	177	18	

Alerting Abstract ...ADVANTAGE - The cache system maximizes drive performance by attaining execution of commands based on past **access history** and detecting suitable number of **segments**. By executing internal processes **in** parallel, optimum performance is achieved... Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**transferred to and from the host. The caching system maximizes drive performance based on past **access history**. The caching system alters execution of commands by coalescing commands or executing internal commands in... ...requests by using a prefetch to store data that may be requested. The caching system **divides** the **cache** memory into **segments** to store multiple streams of data. The number of segments may be continuously adapted according... ...**Claims:**a seek first, obtaining the disk pointer, starting a seek, adjusting a size of each **segment** and number of **segments in** the cache to adapt to commands being processed, **performing** a scan of **the cache** entry table to assign a cache segment to the read command to determine a full... Basic Derwent Week: **200061**

Dialog eLink: Order File History
12/3,K/21 (Item 18 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0010069394 *Drawing available*
WPI Acc no: 2000-375401/**200032**
XRPX Acc No: N2000-281959
HTML page retrieval in local area network, involves separating retrieved HTML page into cacheable and non-cacheable portions, which are respectively stored in cache memory and non-cacheable memory
Patent Assignee: XEROX CORP (XERO)
Inventor: HAWES M K

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 6061715	A	20000509	US 199869818	A	19980430	200032	B

Priority Applications (no., kind, date): US 199869818 A 19980430

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 6061715	A	EN	11	6	

...**retrieval in local area network, involves separating retrieved HTML page into cacheable and non-cacheable portions, which are respectively stored in cache memory and non-cacheable memory Alerting Abstract** ...are retrieved from the node of the distributed network and the retrieved HTML page is **separated** into cacheable and non-cacheable **portions**. Cacheable portion of the HTML page is stored in a cache memory of the client... Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**image. A timer may be employed to refresh the web page at predetermined intervals, while **using** the current URL or the **history** list of the browser to reach the desired web site and retrieve the current status ... ...**Claims:**one cacheable and the at least one non-cacheable portions;storing the at least one **cacheable portion in** a cache memory of the client; **andstoring** the at least one non-cacheable **portion in** a non-cache memory of the client.Basic Derwent Week: **200032**

21/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347: JAPIO

06317767 **Image available**
CACHE MEMORY MANAGEMENT SYSTEM FOR RECORD

Pub. No.: 11-259365 [JP 11259365 A]
Published: September 24, 1999 (**19990924**)
Inventor: SAKAMOTO YASUSHI
Applicant: HITACHI LTD
Application No.: 10-062466 [JP 9862466]
Filed: March 13, 1998 (19980313) ...
Published: 19990924)

ABSTRACT

PROBLEM TO BE SOLVED: To attain improvement in performance through **cache** hit by changing a period for locating the **record** to be **accessed** in the **cache** memory of an external memory control unit in accordance with the type of JOB in the environment of I/O inflow to a high load and locating the **record** to be **accessed** by JOB repeated in every fixed period in the **cache** memory even when there is no access at the level of several minutes in the case of a **record** having high **access** frequency and the interval of access is separated.

SOLUTION: The type of JOB and the... ...by load amount discriminating parts 46a-46b, I/O type discriminating pats 47a-47b and **cache** memory control **parts** 48a-48b **inside** channel adapters 45a-45b of a disk controller 40 and while using a shared memory 50 and a **cache** memory 55, records are stored by JOB types. Thus, data to well hit are prevented from being turned out of the **cache** when there is no access at the level of several minutes and a cache hit... Di01

21/3,K/6 (Item 6 from file: 347)
DIALOG(R)File 347: JAPIO

04989357 **Image available**

CACHE STORAGE AND ACCESS INSTRUCTION GENERATION METHOD

Pub. No.: 07-281957 [JP 7281957 A]
Published: October 27, 1995 (**19951027**)
Inventor: FUJIWARA SHINJI
NISHII OSAMU
UCHIYAMA KUNIO
Applicant: HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)
Application No.: 06-076814 [JP 9476814]
Filed: April 15, 1994 (19940415) ...
Published: 19951027)

ABSTRACT

PURPOSE: To reduce the **cache** mistake frequency in caculation of a matrix, etc., by preventing the updating of the **access history** information on a **cache** line based on the access instruction given from a processor... ...CONSTITUTION: A **cache** 10 **contains** a memory cell **part** 11 **including** the address and data arrays, a hit/miss deciding circuit 12 of access data, a data/tag/Iru (**access history** information) control circuit 13, a selection wait control circuit 14, an Iru bit cell 15... Di01

Dialog eLink: Order File History
21/3,K/7 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0017981754 *Drawing available*
WPI Acc no: 2008-J02058/200851
XRPX Acc No: N2008-643674
Periodic replication performing method, involves comparing extents to identify portion of one of extents, and replicating data and portion of data that is written or is to be written to portion of another extent
Patent Assignee: SYMANTEC OPERATING CORP (SYMA-N)
Inventor: GUPTA V K; KARMARKAR K M; KRISHNAMURTHY R

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 7406487	B1	20080729	US 2003652380	A	20030829	200851	B

Priority Applications (no., kind, date): US 2003652380 A 20030829

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 7406487	B1	EN	16	7	

Original Titles: Method and system for performing periodic **replication using** a **log** **Alerting Abstract** ... readable storage medium having a set of instructions for performing a method for performing periodic **replication using** a write-ordered **log** a system comprising a memory and a processor... Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:**Disclosed is a method and system for performing periodic **replication using** a write-ordered **log**. According to one embodiment, a plurality of write operations to a primary data volume are tracked **using** a write operation **log** and then data associated with the plurality of write operations is **replicated** to a secondary data volume by coalescing the plurality of write operations utilizing the write... Basic Derwent Week: 200851

21/3,K/11 (Item 5 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0015055725 *Drawing available*
WPI Acc no: 2005-403749/200541
XRPX Acc No: N2005-327504

Storage device for computer, pre-reads data to be used by computer from disk device to cache memory, based on command for specifying history of readout location in disk device and computer

Patent Assignee: HITACHI LTD (HITA)
Inventor: KIMURA S; KOBAYASHI I; OSHIMA S

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050114608	A1	20050526	US 2004769030	A	20040130	200541	B
JP 2005157711	A	20050616	JP 2003394920	A	20031126	200541	E
JP 4117656	B2	20080716	JP 2003394920	A	20031126	200849	E

Priority Applications (no., kind, date): JP 2003394920 A 20031126

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20050114608	A1	EN	17	10		
JP 2005157711	A	JA	16			
JP 4117656	B2	JA	16		Previously issued patent	JP 2005157711

Alerting Abstract ...information. The control unit prereads data to be used by computer from disk device to **cache** memory, based on command for specifying **history** and computer that **uses** disk devices. Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:**The data-reading capability of a memory|storage device is improved.The specific **access log** for each computer is preserve|saved,A management computer is made to alert the kind... ... access by a computer.A file reading capability is improved by reading information into the **cache** memory of a memory|storage device beforehand, before the file access from a computer starts... ... which a plurality of computers access to the device. The storage device stores a specific **access history** for each computer and causes a management computer to report a type of file access. This allows the storage device to save information in a **cache** memory before start of a file access to be executed by the computer. **Claims:**It is the

memory|storage device which **has** a control **part**, a **cache** memory, and a disc apparatus,Comprising:A said control part records the data read-out... ... memory|storage device characterized by reading beforehand the data which said computer uses to said **cache** memory from said disc apparatus based on the command which contains the information which designates the computer which **uses** the information which designates said **log**, and this memory|storage device... ... It is a memory|storage device which **has** a control **part**, a **cache** memory, and a disc apparatus,Comprising:The said control part records the data read-out... Basic Derwent Week: 200541

Dialog eLink: Order File History
21/3,K/12 (Item 6 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0015005289 *Drawing available*
WPI Acc no: 2005-353194/200536
Related WPI Acc No: 2004-578818
XRPX Acc No: N2005-288265
Data access provision method in computer system, involves obtaining history cache entry from cache with entries containing mappings between open systems and non-open systems references to locations in data reference
Patent Assignee: EMC CORP (EMCE-N)
Inventor: ALEXANDER J L; BOBER P M; LIANG R

Patent Family (1 patents, 1 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 6889292	B1	20050503	US 2001845385	A	20010430	200536	B
			US 2004875466	A	20040624		

Priority Applications (no., kind, date): US 2001845385 A 20010430; US 2004875466 A 20040624

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 6889292	B1	EN	25	10	Continuation of application	US 2001845385
					Continuation of patent	US 6766418

Data access provision method in computer system, involves obtaining history cache entry from cache with entries containing mappings between open systems and non-open systems references to locations in... Alerting Abstract ...NOVELTY - A **history cache** entry is **obtained** from a **history cache** including entries containing mappings between the open systems reference to location in the data reference and the non-open systems reference to location in reference, based on reference. A partition **cache** entry is obtained from a partition **cache** based on reference. The data is accessed based on request **using** a data reference **obtained** from **history**/partition entry. Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:**Mechanisms and techniques disclose a system that provides access to data using a two part **cache**. The system receives a data access request containing a first data reference, such as an... ... obtains a partition cache entry from a partition cache based on the first data reference. **Cache** entries contain mappings **between** open systems reference locations and non-open

systems references to locations in the data to... ... a data access operation as specified by the data access request using a second data **reference** based upon either the **history cache** entry or the **partition cache** entry. Upon performance **of** the data access operation, the system **then** updates the **history** and partition **caches** with new **cache entries** and can **resize** the partition and history **caches** as needed. ...**Claims:**to data, the method comprising the steps of:receiving a data access request containing a **first** data reference;obtaining a history cache entry from a history cache based on the first... ... and a non-open systems reference to a location in the data, and each history **cache** entry being obtained from a **former** data access operation to the data;obtaining a partition **cache** entry from a partition **cache** based on **the** first data reference; and**performing** a data access operation on the data as specified in the data access request using a second data reference **obtained** from one **of** the **history cache** entry and the **partition cache** entry.... Basic Derwent Week: 200536...

21/3,K/28 (Item 22 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013466177 *Drawing available*
WPI Acc no: 2003-557732/**200352**
XRPX Acc No: N2003-443353
Adaptive data caching method in computer system, involves determining insertion point for caching metadata, based on merit figure calculated to predict retrieval frequency of input data by storage system cache controller
Patent Assignee: HEWLETT-PACKARD DEV CO LP (HEWP); WILKES J (WILK-I); WONG T M (WONG-I)
Inventor: WILKES J; WONG T M

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030088739	A1	20030508	US 2001985426	A	20011102	200352	B
US 6728837	B2	20040427	US 2001985426	A	20011102	200429	E

Priority Applications (no., kind, date): US 2001985426 A 20011102

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20030088739	A1	EN	14	5	

Original Publication Data by AuthorityArgentina**Publication No. Original Abstracts:** A computer system **cache** monitors the effectiveness of data inserted into a cache by one or more sources to... ... a plurality of host systems, each host system includes a host cache, connected to a **storage** system having a storage system **cache**. Ghost **caches** are **used** to **record** hits **from** the **plurality** of host systems performing operations for storing and retrieving data from the storage system **cache**. The storage system **cache** includes a **cache controller** that is **operable** to calculate a merit figure and determine an insertion point in a queue associated with the storage system **cache** based on the **merit** figure. The merit figure is calculated using a weighting algorithm for weighting hits from the... ... A computer system **cache** monitors the effectiveness of data inserted into a cache by one or more sources to... ... each host system includes a host cache, connected to a storage system having a storage **system cache**. Ghost **caches** are used to record hits from **the** plurality **of** host **systems** performing **operations** for storing and **retrieving** data from the storage system **cache**. The storage system **cache** includes a **cache** controller **that** is operable to **calculate** a merit **figure** and determine an insertion point in a queue

associated with the storage system **cache** based on the merit figure. The merit figure **is** calculated using a weighting algorithm for weighting hits from the plurality of sources recorded in... Basic Derwent Week: **200352**

21/3,K/53 (Item 47 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0008943594
WPI Acc no: 1998-495353/**199842**
XRPX Acc No: N1998-386970
Storage allocations balancing method for cache memory of computer system - involves adjusting ratio of size of allocations for first and second portions of cache memory using first and second records
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: CARPENTER K; KING G M; SMITH K F

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5802600	A	19980901	US 1996747721	A	19961112	199842	B

Priority Applications (no., kind, date): US 1996747721 A 19961112

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 5802600	A	EN	10	2	

...**involves adjusting ratio of size of allocations for first and second portions of cache memory using first and second records Alerting Abstract** ...The method involves maintaining a first record of number of **cache** misses over a time period. The **cache** miss occurs when a computer module does not find a desired data block in the **cache** memory. Each computer module includes a local memory for storage of data blocks. The **cache** memory **includes** a first **portion** for storing data blocks and a second portion for storing directory entries which indicates the... ...computer module but a directory entry for the desired data block is absent from the **cache** memory. The first and second **records** are **used** to adjust the ratio of size allocations of the first and second portions so as to reduce the number of false invalidation and **cache** misses... Original Publication Data by AuthorityArgentina**Publication No. Claims:** A method for dynamically balancing storage allocations in a computer system that includes **cache** memory **that** is accessible from plural computer modules, each computer module including local memory for storage of data blocks, the **cache** memory **including** a first portion for storing plural data blocks and a second portion for **storing** directory entries, each directory entry **including** information regarding a validity status of an associated data block, said method comprising the steps of: a) maintaining a first record of a number of **cache** misses over a **time** period, each **cache** miss occurring when **a** computer module does not find a desired

data block resident in said **cache** memory; b) maintaining a second record of a number of false invalidations over a time... Basic Derwent Week: **199842**

Dialog eLink: Order File History
21/3,K/54 (Item 48 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0008690846 *Drawing available*
WPI Acc no: 1998-230158/**199820**
XRPX Acc No: N1998-182308
Log-structured array storage system - has cache memory contg updated logical tracks received from host and clean logical tracks read from LSA DASD, and moves updated tracks from cache memory to memory segment when fraction of updated tracks in cache memory exceeds threshold
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: COHN O; MATTSON R L; MENON J M

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5734861	A	19980331	US 1995571010	A	19951212	199820	B

Priority Applications (no., kind, date): US 1995571010 A 19951212

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 5734861	A	EN	24	10	

Alerting Abstract ...ADVANTAGE - Reduces disk arm motion needed to **record** and **retrieve** data from **log** structured disk storage array **using cache** memory in addition to memory segment of LSA controllers. Because data storage system contains LSA **cache** memory much greater than LSA memory segment, probability is greater that multiple tracks will not... Original Publication Data by AuthorityArgentina**Publication No.**
Original Abstracts:A log-structured array (LSA) includes a relatively large, non-volatile **cache** memory as well **as** a memory segment write buffer. The **LSA cache** memory **contains** both **updated** logical tracks received from the host system and also clean logical tracks read from direct access storage devices of the array. When the fraction of updated tracks in the **cache** memory exceeds a **threshold** value, updated tracks are moved from the LSA **cache** memory to the **memory** segment. With each modified track to be moved, adjacent modified tracks also are moved. The... ...**Claims:**memory segment having a storage capacity of approximately one segment;a log structured array (LSA) **directory containing** a mapping of logical track storage locations to disk storage locations;an LSA **cache** memory having substantially greater storage capacity than the memory **segment**, in which updated logical tracks of data from the host computer and clean logical tracks... Basic Derwent Week: **199820**

15/3K/2 (Item 2 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

01238340

METHOD FOR PRIORITIZING SEGMENTS OF MULTIMEDIA CONTENT IN A PROXY CACHE

PROCEDE DE CLASSEMENT PAR ORDRE DE PRIORITE DE SEGMENTS DE CONTENU MULTIMEDIA DANS UNE ANTEMEMOIRE MANDATAIRE

Patent Applicant/Patent Assignee:

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- **ZHANG Xiaodong**
  301 Beechwood Drive, Williamsburg, VA 23185; US; US(Residence); US(Nationality); (Designated only for: US)

Legal Representative:

- **LEE Denise A(et al)(agent)**
  Hewlett-Packard Company, IP Administration, P.O. Box 242700, Fort Collins, CO 80527-2400; US;

	Country	Number	Kind	Date
Patent	WO	200545708	A1	20050519
Application	WO	2004US35140		20041021
Priorities	US	2003698669		20031031

Designated States: (All protection types applied unless otherwise stated - for

applications 2004+)
AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;
GB; GD; GE; GH; GM; HR; HU; ID; IL; IN;
IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR;
LS; LT; LU; LV; MA; MD; MG; MK; MN; MW;
MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY;
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;
VC; VN; YU; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Language Publication Language: English

Filing Language:	English
Fulltext word count:	6291

Detailed Description:

...O' are kept and the
rest of the segments of O' are evicted from the **cache**. In one embodiment, the number of segments of O'which are kept may be the... ...to step 350 of Figure 3, if object O' is already
segmented on the proxy **cache** 120 then step 370.

14
In step 370 of Figure 3, if content object O... ...utility value, then the last segment or segments of object O' are evicted from the **cache**.

In step 380, the **access log** is updated. In one embodiment, the update
may be complete to **include** the number of **cached segments** of the object (n.') remaining in the **cache** (e.g., zero). After the **access log** is updated the process loops back to step 31 0 of Figure 3. That is, the **cache** is checked to see if enough free space exists to admit the necessary content object...

15/3K/12 (Item 12 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

01088438

INTEGRATED INTERACTIVE MESSAGING SYSTEM AND METHOD
SYSTEME ET PROCEDE DE MESSAGERIE INTERACTIVE INTEGREE

Patent Applicant/Patent Assignee:

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  360 Newbury Street, 7th Floor, Boston, MA 02115; US; US(Residence); US(Nationality); (For all designated states except: US)

Patent Applicant/Inventor:

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  43 Follen Road, Lexington, MA; US; US(Residence); US(Nationality); (Designated only for: US)
- **HWANG Boon**
  22215 NE 85th Street, Redmond, WA 98053; US; US(Residence); CA(Nationality); (Designated only for: US)
- **NANDIWADA Srinivasarao**
  15 Alfred Road, Apt. E, Milford, MA-01757; US; US(Residence); IN(Nationality); (Designated only for: US)
- **PRIYADARSHAN Eswar**
  39 Cricket Lane, West Roxbury, MA 02132; US; US(Residence); US(Nationality); (Designated only for: US)

Legal Representative:

- **SAMUEL Richard(et al)(agent)**
  Goodwin Procter LLP, 7 Becker Farm Road, Roseland, NJ 07068; US;

	Country	Number	Kind	Date
Patent	WO	200410593	A2-A3	20040129
Application	WO	2003US23642		20030718
Priorities	US	2002397402		20020719

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Language Publication Language: English

Filing Language:	English
Fulltext word count:	11679

Detailed Description:

...opt-out status of messaging users; the program instruction unit 158 configured to retrieve and **cache** the program instructions required; the bulksend units 146 configured to efficiently send large pushes to messaging users **within** the program **segment**; the dialog server in-queue 142 which stores every messaging device originated message or events for execution by the execution units 140; the message delivery status system 143 **used** to **record** message delivery errors returned by the message exchange 108; the monitoring unit 164 used by...

15/3K/20 (Item 20 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00987515

SCSI-TO-IP CACHE STORAGE DEVICE AND METHOD
PROCEDE ET DISPOSITIF DE MEMOIRE CACHE DU PROTOCOLE SCSI VERS LE PROTOCOLE IP

Patent Applicant/Patent Assignee:

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Inventor(s):

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  81 West Wind Road, Wakefield, RI 02879; US

Legal Representative:

- **O'SHEA Patrick J(et al)(agent)**
  Samuels, Gauthier & Stevens, LLP, Suite 3300, 225 Franklin Street, Boston, MA 02110; US;

	Country	Number	Kind	Date
Patent	WO	200317598	A1	**20030227**
Application	WO	2002US26292		20020815
Priorities	US	2001312471		20010815

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT;
SE; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Language Publication Language: English

Filing Language:	English
Fulltext word count:	4049

Detailed Description:

...in the SCSI-to-IP cache storage system includes a two level hierarchy: a RAM **cache** and a log disk. Frequently accessed data reside in the RAM, which is orcranized as a LRU **cache** 58 as shown in FIG. 3. Whenever the newly written data in the RAM are... ...free, data are written into the log 1 5 disk. There are also less frequently **accessed** data kept in the **log** disk. Data in the log disk are organized in the format of segn7ents similar to that in a Log-structured File System. A **segment contains** a plurality ...this research is to design an efficient data structure and a search algorithm for RAM **cache**. As shown in FIG. 3), the RAM **cache** includes a hash table that is used to locate data in the **cache**, a data buffer which contains several data slots, and a few Inmemory headers. Data blocks...

15/3K/25 (Item 25 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00931280

DISTRIBUTED CACHE FOR STATE TRANSFER OPERATIONS
ANTEMEMOIRE REPARTIE POUR OPERATIONS DE TRANSFERT D'ETAT

Patent Applicant/Patent Assignee:

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  808 Howell Street, 2nd Floor, Seattle, WA 98101; US; US(Residence); US(Nationality)

Inventor(s):

- **ERICKSON Roger D**
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Legal Representative:

- **WRIGHT Bradley C(agent)**
  Banner & Witcoff, Ltd., 1001 G Street NW -11th Floor, Washington, DC 20001-4597; US;

	Country	Number	Kind	Date
Patent	WO	200265321	A1	**20020822**
Application	WO	2002US3626		20020208
Priorities	US	2001783147		20010213

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Language Publication Language: English

Filing Language: English

Fulltext word count: 12509

Detailed Description:

...complete a GET operation by obtaining the requested record from the local copy of the **cache** 205 (or the copy of the portion of the cache 205) from the cache memory... ...With some preferred embodiments of the invention, this request will be immediately successful, as each **cache** memory 203 stores a complete copy of the **cache** 205. If the requested record is not found in the local **cache** memory 203, (e.g., if the **cache** memory 203 **contains** only a **portion** of the **cache** 205 that does not have the requested record or a copy of the **cache** 205 that has been corrupted), however, then the **cache** API 403 will involve the distributed **cache** application 405 to **obtain** the **record** from another source.

With the peer configured embodiment of the invention shown in Figs. 2A and 2B, the distributed **cache** application 405 will attempt to retrieve the requested record from one or more of the...

15/3K/84 (Item 30 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS

00563437

Data storage format conversion method and system, data access method and access control apparatus

Verfahren und System fur Datenspeicher-Formatumwandlung, Daten-Zugriffsverfahren und Steuergerat

Methode et systeme de conversion de format de stockage de donnees, methode d'acces aux donnees et dispositif de controle d'acces

Patent Assignee:

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  (Proprietor designated states: all)

Inventor:

- **Nakamura, Yoichi, c/o Mitsubishi Denki K.K.**
  Computer Seisakusho, 325 Kamimachiya; Kamakura-shi, Kanagawa 247; (JP)

Legal Representative:

- **Pfenning, Meinig & Partner (100961)**
  Mozartstrasse 17; 80336 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	559142	A2	19930908	(Basic)
	EP	559142	A3	19960904	
	EP	559142	B1	20010613	
Application	EP	93103292		19930302	
Priorities	JP	9249833		19920306	
	JP	939002		19930122	

Designated States:
DE; FR; GB;

International Patent Class (V7): G06F-003/06; G06F-012/04**Abstract Word Count:** 248
NOTE: 1
NOTE: Figure number on first page: 1

Legal Status Type	Pub. Date	Kind	Text

Language Publication: English
Procedural: English
Application: English

Fulltext Availability Available Text	Language	Update	Word Count
CLAIMS A	(English)		1052
SPEC A	(English)		33769
CLAIMS B	(English)	200124	1103
CLAIMS B	(German)	200124	1118
CLAIMS B	(French)	200124	1325
SPEC B	(English)	200124	33548
Total Word Count (Document A) 34823			
Total Word Count (Document B) 37094			
Total Word Count (All Documents) 71917			

Specification: ...determined by the position calculation unit 53 to thereby fetch and place it in the **cache** memory 6, for allowing the record of concern to be retrieved. A management unit retrieval... ...the record search unit 54 then compares the relative position information (sector value) of the **record** to be **accessed** with the relative position information (sector value) held by the retrieved management unit. In this... ...the units for management existing on the FBA disk 9 are sequentially fetched into the **cache** memory until the relative position information of the **record** to be **accessed has** been detected. A **record** specifying **section** 57 also **included** in the **record retrieval** unit 54 responds to the retrieval of the aimed management unit by the management unit retrieval section 56 to thereby specify (or identify discriminatively) the variable-length **record** of concern by making **use** of the address information contained in the relevant management unit. Execution of the data transfer between the FBA disk 9 and the **cache** memory 6 in response to the FBA command is performed by a data path server...

Specification: ...determined by the position calculation unit 53 to thereby fetch and place it in the **cache** memory 6, for allowing the record of concern to be retrieved. A management unit retrieval... ...the record search unit 54 then compares the relative position information (sector value) of the **record** to be **accessed** with the relative position information (sector value) held by the retrieved management unit. In this... ...the units for management existing on the FBA disk 9 are sequentially fetched into the **cache** memory until the relative position information of the **record** to be **accessed has** been detected. A **record** specifying **section** 57 also **included** in the **record retrieval** unit 54 responds to the retrieval of the aimed management unit by the management unit retrieval section 56

to thereby specify (or identify discriminatively) the variable-length **record** of concern by making **use** of the address information contained in the relevant management unit. Execution of the data transfer between the FBA disk 9 and the **cache** memory 6 in response to the FBA command is performed by a data path server...